the Watershed Watch

Newsletter of the Jordan River Watershed Council Spring 2011, Volume 8

Mission: The Jordan River Watershed Council is dedicated to the ecological and economic sustainability of the Salt Lake Countywide Watershed through the promotion of stakeholder involvement.

In This Issue

Upcoming Events

Salt Lake Countywide Watershed Symposium, Aug 10-12
West Valley City, free, open to public
www.watershed.slco.org

Utah Water Quality Conference
Aug 30-Sep 1
Logan, http://ag.utah.gov/divisions/conservation/npsconference.html

Questions? Comments?

Contact us at (801) 468-2711
www.watershed.slco.org

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Watershed Planning & Restoration Program
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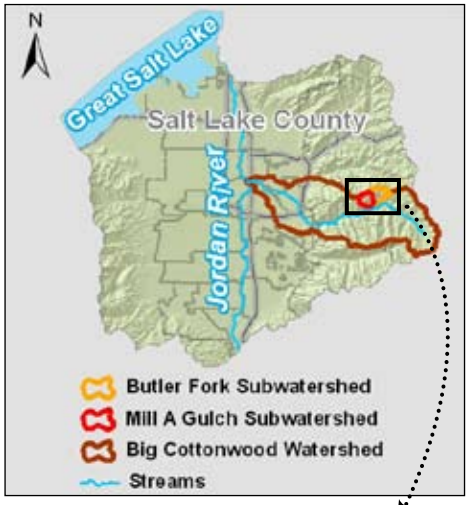
We All Live in a Watershed

A Water-what? Watersheds Defined and Why They're Threatened

by Watershed Planning & Restoration Program Staff

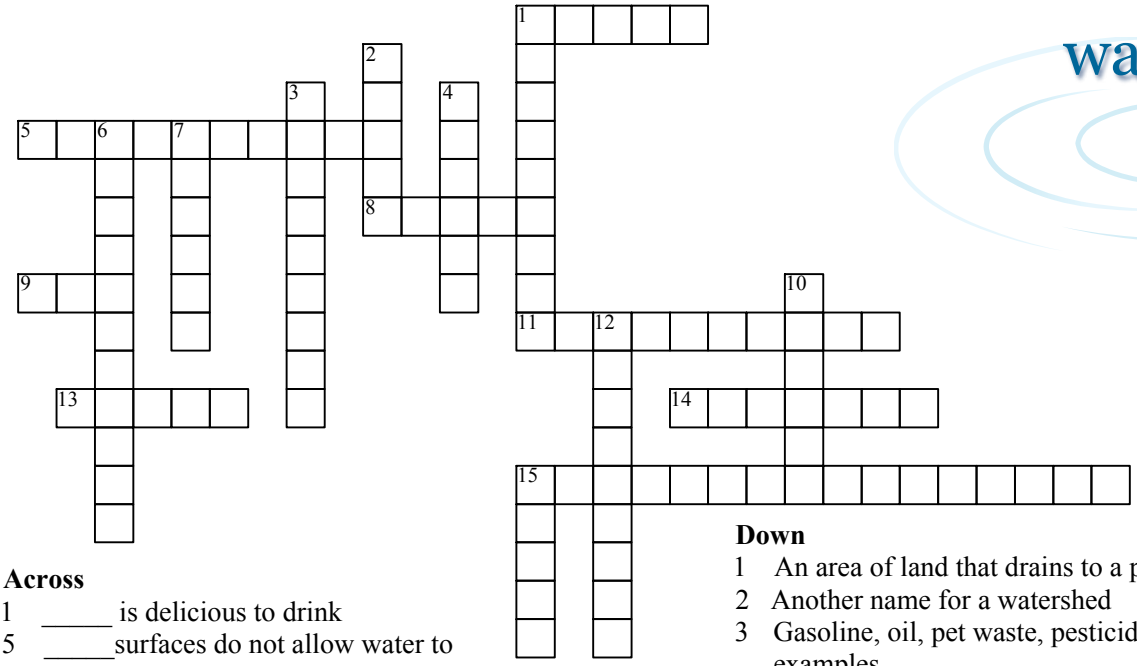
No matter where you live, you live in a watershed. A **watershed** (also referred to as a drainage basin) is an area of land that drains to a particular body of water, whether it's a stream, river, lake, bay, aquifer, or ocean. Think of a watershed like a bathtub—no matter where water falls in the tub, it all flows down the drain. Now, think of a mountain range as a series of connected bathtubs (or valleys). When rain falls on a ridgeline, it falls into one valley or another, and down to the water body at the bottom. Each valley is a separate watershed and the ridgeline between them is called the **watershed divide**. So, for example, each little stream that flows into Big Cottonwood Creek has its *own* watershed, but combined they are all part of the Big Cottonwood Creek Watershed. In turn, the watersheds for Big Cottonwood Creek, Little Cottonwood Creek, Mill Creek, and all the rest of the land that drains into the Jordan River, are part of the larger Jordan River Watershed. Go even bigger, and the Jordan River Watershed is part of the Great Salt Lake Watershed! This watershed is an example of a **closed basin** because

continued on page 4



The Mill A Gulch and Butler Fork Creek Watersheds make up part of the larger Big Cottonwood Creek Watershed. Arrows indicate the direction that rain and snowmelt flow downhill from the watershed divides (called runoff).

water quality crossword



Find answers in the articles throughout this newsletter!

Across

1 _____ is delicious to drink
5 _____surfaces do not allow water to soak into the ground below
8 This is a provision of the Clean Water Act
9 Examples of this are rain gardens, or street sweeping
11 "We all live _____"
13 A waterway is another name for a ____ or a river
14 _____'s pipeline was involved in the Red Butte spill
15 The mystery BMP on page 3

Down

1 An area of land that drains to a particular waterbody
2 Another name for a watershed
3 Gasoline, oil, pet waste, pesticides, & fertilizers are examples
4 The river in Salt Lake County
6 This is currently limited in dishwashing detergent*
7 Rainfall and snowmelt that flow over the land surface
10 A type of organic pollution
12 Storm drains flow directly into our local _____
15 A ____ source is any pollution that can be traced back to a single source

*For all you chemistry wonks out there, we know this should be -ic not -ous.

What's up with Red Butte Creek? Utah Division of Water Quality Update

By Stacee Adams, Environmental Planning Consultant, Department of Environmental Quality; and Hilary Arens, Jordan Basin Coordinator, Division of Water Quality

In the months following the first crude oil leak from Chevron's pipeline into Red Butte Creek on June 12, 2010, the Unified Command —comprised of the Environmental Protection Agency, Utah Division of Water Quality (DWQ), Salt Lake Valley Health Department and Salt Lake City—has been at the forefront of the response efforts, ensuring that initial sampling, cleanup, monitoring, and restoration are all done appropriately.

While much of the initial cleanup of the 800-barrel leak is complete, sampling, monitoring and targeted contaminated soil removal will continue, with future sampling planned through 2011 and beyond. Additionally, when "hotspots" of contamination arise DWQ will work with Chevron to ensure they are properly and thoroughly cleaned up. Although the focus has been on Red Butte Creek, crews are also removing contaminated soils in the Liberty Pond area. It is anticipated that the pond will be refilled by April 2011.

As scientists began winding down cleanup efforts on the June spill, a faulty valve from the same Chevron pipeline caused another spill in December, roughly 100 yards from the original leak. Crews quickly cleaned it up and DWQ scientists continue to assess the damage of the second leak, although no evidence was detected that oil reached the creek.

The cleanups will be complete when soil and water samples indicate that contamination is no longer a public health concern. In the meantime, scientists are optimistic that remediation efforts are working due to a significant reduction in contamination levels.

For more information about the spill and the response, including specific monitoring and sampling data, go to *www.deq.utah.gov/Issues/redbuttespill/index.htm#top* □

Booms placed in the Jordan River soak up oil flowing in from the Red Butte Creek spill, June 2010. (Photo courtesy of DWQ)

Protecting Our Local Waters

A Look at Salt Lake County's Stormwater Regulatory Program

by Watershed Planning & Restoration Program Staff

Did you know that rain and melting snow can be considered pollution? When precipitation flows across roads, driveways, rooftops, and other impervious surfaces, it picks up pollutants such as fertilizer, pet waste, trash, oil, leaves, and dirt. This is called **stormwater runoff** and the pollutants it carries are transported to streams, rivers, and lakes. That's because storm drains flow *directly* into our local waterways. No filters, no treatment. The good news—since stormwater is considered pollution it is regulated according to state and federal guidelines.

The National Pollutant Discharge Elimination System (NPDES), a provision of the Clean Water Act, prohibits discharge of pollutants into waters of the United States unless a special permit is issued by the Environmental Protection Agency (EPA), a state, or another delegated agency. To meet the provisions of the NPDES, the Utah Pollutant Discharge Elimination System (UPDES) requires permits for the discharge of pollutants from any point source into waters of the State. A **point source** is any pollution that can be traced back to a *single origin* or *source*, such as a sewage treatment plant discharge. In the case of stormwater, the storm drain pipe (or ditch, channel, etc.) that the stormwater flows out of is considered the *source*.

As a small municipal separate storm sewer system (MS4) with a population of approximately 141,000 people, the unincorporated Salt Lake County is required to meet UPDES regulations. To mitigate stormwater pollution and comply with requirements in the UPDES permit, Salt Lake County works closely with fourteen other cities to increase stormwater awareness. This alliance, known as the *Salt Lake County Stormwater Coalition*, produces TV & theatre advertising campaigns, an annual water fair at Hogle Zoo for 4th graders (attended by nearly 2,000 students last year), printed educational materials, and stream crossing signs for public roadways. Other ways to protect water quality include the requirement of street sweeping programs, controls for runoff from construction sites, oil/water separators, porous pavement, low impact development, and rain gardens, among other things—these are called **Best Management Practices** or **BMPs**. In addition, measures are taken to detect illegal connections and discharges into storm drain systems. Non-compliance with stormwater regulations is enforced by local, state, and federal agencies. In many cases, stop-work orders, citations, fines and penalties are issued.

In the future, regulations may become tighter as awareness of water quality impairments increases. There is no question this will be a challenge with available resources and funding, but the reward of overall higher water quality will be well worth the cost, as it will improve the quality of our lives and those of future generations. Visit *www.stormwatercoalition.org* to learn more. Don't forget, we all live downstream! □

Can you name this stormwater BMP?

BMP stands for **Best Management Practice,** a type of water pollution control. Stormwater BMPs include structural and nonstructural controls (sediment catch basins, vegetated filter strips, rain gardens, etc.), operation and maintenance procedures (street sweeping, vehicle cleaning protocols), and other practices.

Identify the stormwater BMP shown below and we'll send you one of our **"i love the jordan river"** prizes! Contact Bob Thompson with your answer at rthompson@slco.org.

WHAT IS A WATERSHED?
continued from cover

the Great Salt Lake is the lowest point in the landscape and has no outlet. Many regional scale watersheds in the United States will ultimately drain to the ocean.

When it comes to protecting nature and controlling pollution, it's beneficial to think in terms of **watershed-scale planning**. That's because everything that happens within a watershed may ultimately affect the water quality of the stream, river or lake at the bottom. Pollutants on the ground—such as gasoline, oil, animal excrement, pesticides, fertilizers, etc.—are picked up by **runoff** and may eventually make their way into our streams and rivers. Runoff in developed and urban areas, where there is a much higher percentage of **impervious surfaces** like rooftops and pavement, will flow faster and pick up many more pollutants as compared with precipitation that falls on rangeland or forest. As development and urbanization continues, more impervious surfaces lead to ever growing volumes of runoff dumping into our streams and rivers. This leads to a higher probability of erosion, degraded water quality, flooding, and property damage.

In Salt Lake County, we're thinking at the scale of the Jordan River Watershed since the County falls almost entirely within its boundaries. Stream bank restoration, improvements to riparian habitat, education outreach, and use of Best Management Practices (BMPs) to help slow down runoff and filter pollutants before they enter our waterways are all part of our mission to protect the Jordan River Watershed.

Learn more about local watershed issues at the 5th Annual Salt Lake Countywide Watershed Symposium, August 10-12, 2011. More information at *www.watershed.slco.org*. □

5th Annual
Salt Lake Countywide

Watershed Symposium

August 10-12, 2011

Join the conversation about water quality, pollution control, and nature protection. Find out what's being done and what you can do to help!

free & open to everyone

www.watershed.slco.org

im·per·vi·ous sur·face (noun)
A non-porous surface that slows or prevents water from soaking into the soil, which can cause water to run off the surface more rapidly or in greater quantities than under natural conditions. These surfaces are mainly artificial structures, such as roads, sidewalks, driveways, and rooftops. Soil and gravel compacted by development are also highly impervious.

Legislative Roundup

☑Passed ⏳Pending ✋Tabled/Postponed ☒Failed

It's that time of year again and the 2011 Utah State Legislative Session is in full swing. Several bills are in front of the Legislature that could significantly affect water quality and watershed function in Salt Lake County. Below are a few bills of interest:

☑**S.B. 20, Management of Water Rights Amendments (Sponsor: Senator Dennis Stowell)** This legislation allows local districts to hold certain water rights for the recharge of groundwater basins, and specifies the recharge as a beneficial use of water.

☑**S.B. 26, Water Law Modifications (Sponsor: Senator Margaret Dayton)** This bill makes the filing of a certificate of appropriation of water with the county recorder permissive, rather than mandatory.

⏳**S.B. 297, Use and Disposal of Deep Water (Sponsor: Senator Kevin Van Tassell)**

✋**H.B. 246, Repeal of Phosphorous Limit in Dishwashing Detergent (Sponsor: Rep. Stephen Sandstrom)** If passed, this bill would end the prohibition on selling household dishwashing detergent containing 0.5% phosphorus by weight.

⏳**H.B. 399, Environmental Litigation Bond (Sponsor: Rep. Michael Noel)** This bill would require that during litigation the plaintiff post a bond in order to receive a preliminary injunction. This bond would only apply in cases involving the issuing of permits by the following departments: Environmental Quality, Natural Resources, Transportation, and School and Institutional Trust Lands Administration. Requires plaintiffs to pay some damages if suit is unsuccessful.

⏳**H.B. 400, Regulation of Mining Operations (Sponsor: Rep. Michael Noel)** This bill would terminate local regulation of mining operations on state and federal land, and vest power completely with the state; would likely increase mining activity on these lands.

⏳**H.B. 428, Water Issues Task Force (Sponsor: Rep. Patrick Painter)**

⏳**H.B. 429, Water Quality Modifications (Sponsor: Rep. Patrick Painter)**

Visit the Utah Legislature website for more information on these and other bills

http://le.utah.gov

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